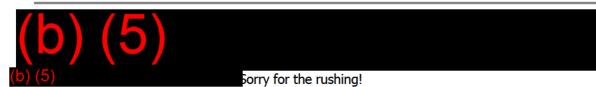
Chao Chen From: Paul Schlosser To:

KennyCrump@email.com; Paul White; Christopher Portier; Ravi Subramaniam; Rory Conolly; Thomas A.; Weihsueh Chiu Cc:

Subject: Re: critique of BBDR modeling 02/12/2010 11:08 AM Date:



Chao

-----Paul Schlosser/RTP/USEPA/US wrote: -----

To: Chao Chen/DC/USEPA/US@EPA From: Paul Schlosser/RTP/USEPA/US

Date: 02/12/2010 10:40AM

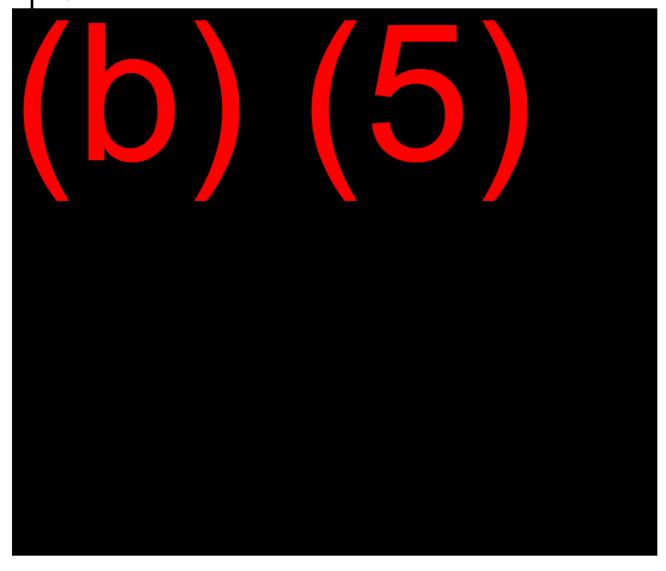
cc: KennyCrump@email.com, Paul White/DC/USEPA/US@EPA, Christopher Portier

<portier@niehs.nih.gov>, Ravi Subramaniam/DC/USEPA/US@EPA, Rory Conolly/RTP/USEPA/US@EPA,

Thomas A. <tlouis@jhsph.edu>, Weihsueh Chiu/DC/USEPA/US@EPA

Subject: Re: critique of BBDR modeling

Chao,





-Paul

Chao Chen---02/12/2010 08:21:37 AM---I was reluctant to join the discussion because I am going out of town for 2 weeks, but I though I ma

From: Chao Chen/DC/USEPA/US

To: Paul Schlosser/RTP/USEPA/US@EPA

Cc: KennyCrump@email.com, Paul White/DC/USEPA/US@EPA, Christopher Portier

<portier@niehs.nih.gov>, Ravi Subramaniam/DC/USEPA/US@EPA, Rory
Conolly/RTP/USEPA/US@EPA, Thomas A. <tlouis@jhsph.edu>, Weihsueh

Chiu/DC/USEPA/US@EPA

Date: 02/12/2010 08:21 AM

Subject: Re: critique of BBDR modeling

I was reluctant to join the discussion because I am going out of town for 2 weeks, but I though I may start some healthy debate and discussions about the use of BBDR models. For now I offer my quick comments in the file attached below. If necessary, I'd suggest that we find some time to get all together to have a joint discussion.

[attachment "A View.docx" deleted by Paul Schlosser/RTP/USEPA/US]

Chao

Paul Schlosser---02/11/2010 10:10:22 AM---Ravi, I've now read the article in it's entirety, and find it extremely discouraging of ... well, re

From: Paul Schlosser/RTP/USEPA/US

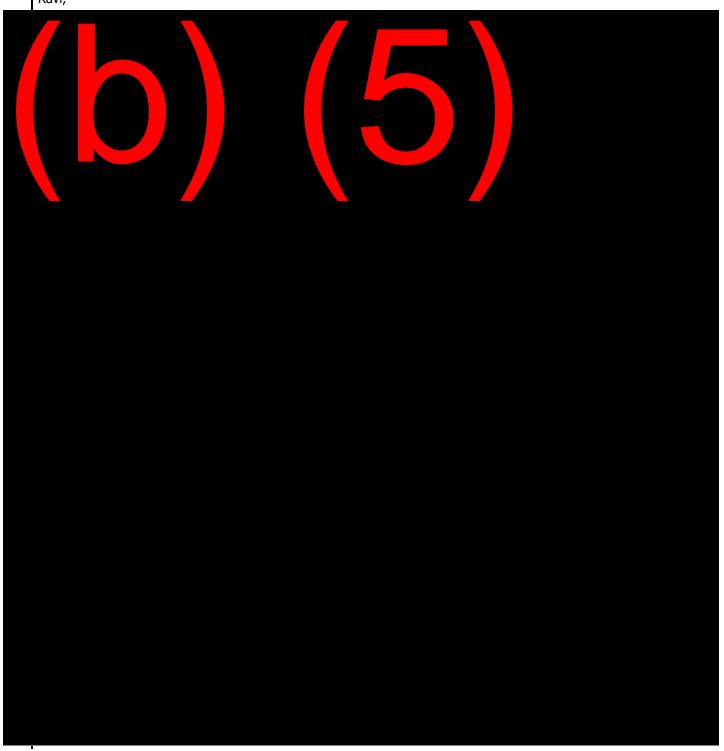
To: Ravi Subramaniam/DC/USEPA/US@EPA

Chao Chen/DC/USEPA/US@EPA, KennyCrump@email.com, Paul White/DC/USEPA/US@EPA, Christopher Portier <portier@niehs.nih.gov>, Rory Conolly/RTP/USEPA/US@EPA, Thomas A. <tlouis@jhsph.edu>, Weihsueh Chiu/DC/USEPA/US@EPA Cc:

Date: 02/11/2010 10:10 AM

Subject: Re: critique of BBDR modeling

Ravi,



## (b) (5)

-Paul

Ravi Subramaniam---02/03/2010 03:14:20 PM---Paul, Thank you for taking the time to critique our BBDR commentary. I'm sorry it has taken me a whi

From: Ravi Subramaniam/DC/USEPA/US

To: Paul Schlosser/RTP/USEPA/US@EPA

Cc: Paul White/DC/USEPA/US@EPA, Rory Conolly/RTP/USEPA/US@EPA, Weihsueh

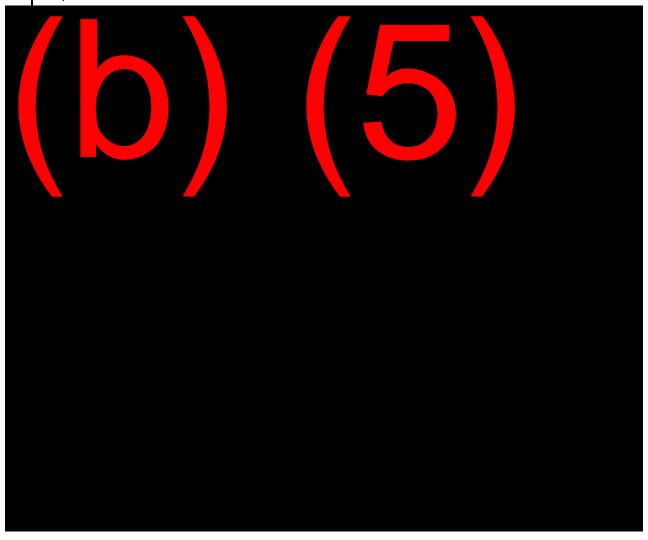
Chiu/DC/USEPA/US@EPA, Christopher Portier <portier@niehs.nih.gov>, KennyCrump@email.com, Louis, Thomas A. <tlouis@jhsph.edu>, Thomas A.

<tlouis@jhsph.edu>, Chao Chen/DC/USEPA/US@EPA

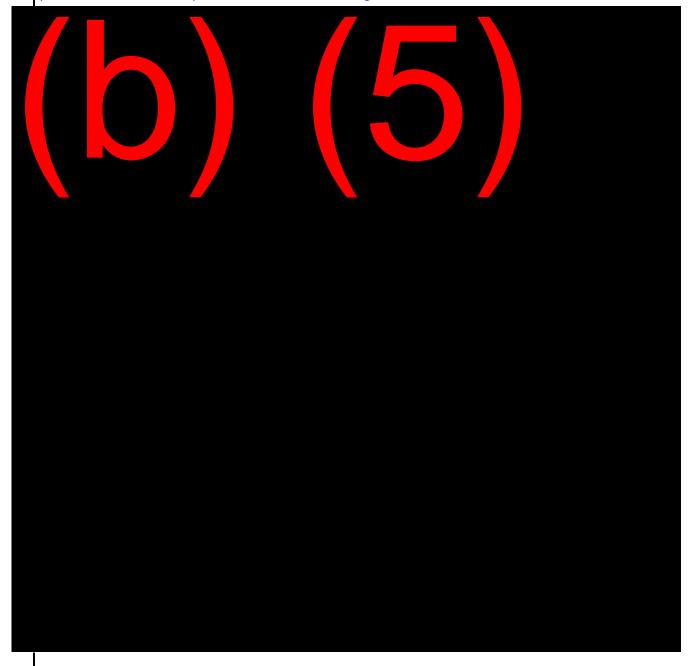
Date: 02/03/2010 03:14 PM

Subject: Re: critique of BBDR modeling

Paul,



At this time there may be so much uncertainty regarding molecular level processes and their parameters that the uncertainty in their predictions is as much as appears to be the case in use of statistical models. But I also wonder if the apparent level of (un)certainty that comes from doing doseresponse modeling with a single statistical model, which is after all based on certain assumptions about rate-limiting biological processes, is false? How do we know that the linearized multi-stage model provides an accurate extrapolation of cancer risk from high- to low-doses?



Ravi Subramaniam Environmental Health Scientist NCEA-Washington, ORD, EPA N-7922, Two Potomac Yard, Crystal City (703) 347-8606, (301) 515-2701 (alternate office) Paul Schlosser---01/12/2010 10:30:09 AM---Thanks, Ravi. I'll have to read through it more carefully when I can.

From: Paul Schlosser/RTP/USEPA/US

To: Ravi Subramaniam/DC/USEPA/US@EPA

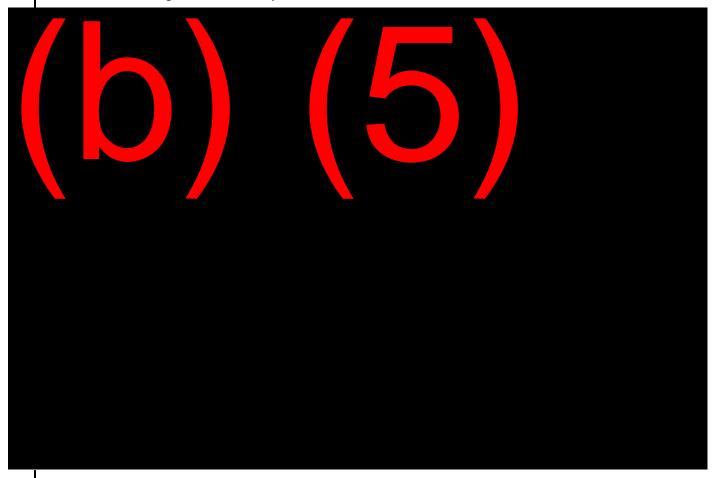
Cc: Paul White/DC/USEPA/US@EPA, Rory Conolly/RTP/USEPA/US@EPA

Date: 01/12/2010 10:30 AM

Subject: Re: critique of BBDR modeling

Thanks, Ravi.

I'll have to read through it more carefully when I can.



Well, those are my thoughts for now.

-Paul

Ravi Subramaniam---01/12/2010 08:56:36 AM---The disclaimer has been taken care of. It was there in the originally submitted version but got acc

From: Ravi Subramaniam/DC/USEPA/US

To: Paul White/DC/USEPA/US@EPA, Paul Schlosser/RTP/USEPA/US@EPA, Rory

Conolly/RTP/USEPA/US@EPA

Date: 01/12/2010 08:56 AM

Subject: Re: critique of BBDR modeling

The disclaimer has been taken care of. It was there in the originally submitted version but got accidentally deleted in the course of edits during the review process as the format of the paper changed from a full-length to a commentary. Thanks for bringing the issue to our attention.

Ravi.

\_\_\_\_\_

Ravi Subramaniam Environmental Health Scientist NCEA-Washington, ORD, EPA N-7922, Two Potomac Yard, Crystal City (703) 347-8606, (301) 515-2701 (alternate office)

Paul White---01/07/2010 04:49:42 PM---Hi Rory, Kenny will be checking with EHP to see that

From: Paul White/DC/USEPA/US

To: Rory Conolly/RTP/USEPA/US@EPA

disclaimer is included - it was once there but

Cc: Paul Schlosser/RTP/USEPA/US@EPA, Ravi Subramaniam/DC/USEPA/US@EPA

Date: 01/07/2010 04:49 PM

Subject: Re: critique of BBDR modeling

Hi Rory,



Best, Paul

PS, from seeing the addressees on your earlier note, I was wondering if there was some discussion group that might be active on modeling issues. If so I'd be happy to be included.

Rory Conolly---01/07/2010 03:15:33 PM---The paper has been accepted at EHP, but the copy we've been looking at isn't a galley proof, so perh

From: Rory Conolly/RTP/USEPA/US

To: Paul Schlosser/RTP/USEPA/US@EPA

Paul White/DC/USEPA/US@EPA Cc:

Date: 01/07/10 03:15 PM

Subject: Re: critique of BBDR modeling

The paper has been accepted at EHP, but the copy we've been looking at isn't a galley proof, so perhaps a disclaimer will appear in that version. I suspect that this article will be viewed as representing EPA policy whether or not it contains the disclaimer.

- Rory

Rory B. Conolly, Sc.D. **Integrated Systems Toxicology Division** NHEERL/ORD U.S. Environmental Protection Agency MD B143-06 Research Triangle Park North Carolina 27711 U.S.A.

e-mail: Conolly.Rory@epa.gov Telephone: +1.919.541.3350

\_\_\_\_\_

Paul Schlosser---01/07/2010 11:18:04 AM---I just looked at the abstract, but then... there appears to be no disclaimer, "This article represen

From: Paul Schlosser/RTP/USEPA/US

To: Paul White/DC/USEPA/US@EPA

Cc: Rory Conolly/RTP/USEPA/US@EPA

01/07/2010 11:18 AM Date:

Subject: Re: critique of BBDR modeling

I just looked at the abstract, but then... there appears to be no disclaimer, "This article represents the views of the authors," etc. Should that not be included?!

-Paul

Rory Conolly---01/07/2010 09:32:46 AM---Here's a paper that's been accepted by Environmental Health Perspectives of which you should be awar

From: Rory Conolly/RTP/USEPA/US

To: Anna Lowit/DC/USEPA/US@EPA, Rita Schoeny/DC/USEPA/US@EPA, Edward

Ohanian/DC/USEPA/US@EPA, Paul Schlosser/RTP/USEPA/US@EPA, Eva McLanahan/RTP/USEPA/US@EPA, Cecilia Tan/RTP/USEPA/US@EPA, Rocky

Goldsmith/RTP/USEPA/US@EPA, Marina Evans/RTP/USEPA/US@EPA, Christopher

Eklund/RTP/USEPA/US@EPA, Elaina Kenyon/RTP/USEPA/US@EPA

Date: 01/07/2010 09:32 AM

Subject: critique of BBDR modeling

Here's a paper that's been accepted by Environmental Health Perspectives of which you should be aware.

- Rory

[attachment "EHP BBDR Commentary.pdf" deleted by Paul Schlosser/RTP/USEPA/US]

What Role for Biologically-Based Dose-Response Models in Estimating Low-Dose Risk? 1

Kenny S. Crump 1, Chao Chen 2, Weihsueh A. Chiu 2, Thomas A. Louis 3, Christopher J. Portier 4, Ravi 2 P. Subramaniam 2, Paul D. White 2

\_\_\_\_\_

Rory B. Conolly, Sc.D.
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U.S. Environmental Protection Agency
MD B143-06
Research Triangle Park
North Carolina 27711
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